The listing of claims presented below replaces all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) A recombinant gene medicine of adenovirus vector and p53 gene for treating proliferative disease, wherein it is constructed by adenovirus vector and human tumor suppressor p53 gene expression cassette, and its recombinant sequence is:

the right end of adenovirus 5

ATGTTTACCGCCACACTCGCAGGGTCTGCACCTGGTGCGGGTCTCATCGTACCT

CAGCACCTTCCAGATC$_{70}$TCTGACATGCGATGTCGACTCGACTGCTTCGCGATGT

ACGGGCCAGATATACGCGTATCTGAGGGGACTAGGGTGTGTTTAGGCGAAAAG

CGGGGCTTCGGTTGTACGCGGTTAGGAGTCCCCTCAGGATATAGTAGTTTCGCT

TTTGCATAGGGAGGGGGAAATGTAGTCTTATGCAATACTCTTGTAGTCTTGCAA

CATGGTAACGATGAGTTAGCAACATGCCTTACAAGGAGAGAAAAGCACCGTG

CATGCCGATTGGTGGAAGTAAGGTGGTACGATCGTGCCTTATTAGGAAGGCAA

CAGACGGGTCTGACATGGATTGGACGAACCACTGAATTCCGCATTGCAGAGAT

ATTGTATTTAAGTGCCTAGCTCGATACAATAAACGCCATTTGACCATTCACCAC

ATTGGTGTGCACCTCCAAGCTTGGTACCGAGCTCGGATCCCG$_{523}$CTAGAGCCAC

CGTCCAGGGAGCAGGTAGCTGCTGGGCTCCGGGGACACTTTGCGTTCGGGCTG

GGAGCGTCTTTCCACGACGGTGACACGCTTCCCTGGATTGGCAGCCAGACTGCT

TTCCGGGTCACTGCC$_{655}$ATGGAGGAGCCGCAGTCAGATCCTAGCGTCGAGCCCC

CTCTGAGTCAGGAAACATTTTCAGACCTATGGAAACTACTTCCTGAAAACAACG

TTCTGTCCCCCTTGCCGTCCCAAGCAATGGATGATTTGATGCTGTCCCCGGACG

ATATTGAACAATGGTTCACTGAAGACCCAGGTCCAGATGAAGCTCCCAGAATG

CCAGAGGCTGCTCCCCCCGTGGCCCCTGCACCAGCAGCTCCTACACCGGCGGC

CCCTGCACCAGCCCCCTCCTGGCCCCTGTCATCTTCTGTCCCTTCCCAGAAAAC

CTACCAGGGCAGCTACGGTTTCCGTCTGGGCTTCTTGCATTCTGGGACAGCCAA

GTCTGTGACTTGCACGTACTCCCCTGCCCTCAACAAGATGTTTTGCCAACTGGC

CAAGACCTGCCCTGTGCAGCTGTGGGTTGATTCCACACCCCCGCCCGGCACCCG

CGTCCGCGCCATGGCCATCTACAAGCAGTCACAGCACATGACGGAGGTTGTGA

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GGCGCTGCCCCCACCATGAGCGCTGCTCAGATAGCGATGGTCTGGCCCCTCCTC
AGCATCTTATCCGAGTGGAAGGAAATTTGCGTGTGGAGTATTTGGATGACAGA
AACACTTTTCGACATAGTGTGGTGGTGCCCTATGAGCCGCCTGAGGTTGGCTCT
GACTGTACCACCATCCACTACAACTACATGTGTAACAGTTCCTGCATGGGCGGC
ATGAACCGGAGGCCCATCCTCACCATCATCACACTGGAAGACTCCAGTGGTAA
TCTACTGGGACGGAACAGCTTTGAGGTGCGTGTTTGTGCCTGTCCTGGGAGAGA
CCGGCGCACAGAGGAAGAGAATCTCCGCAAGAAAGGGGAGCCTCACCACGAG
CTGCCCCCAGGGAGCACTAAGCGAGCACTGCCCAACAACACCAGCTCCTCTCC
CCAGCCAAAGAAGAAACCACTGGATGGAGAATATTTCACCCTTCAGATCCGTG
GGCGTGAGCGCTTCGAGATGTTCCGAGAGCTGAATGAGGCCTTGGAACTCAAG
GATGCCCAGGCTGGGAAGGAGCCAGGGGGGAGCAGGGCTCACTCCAGCCACCT
GAAGTCCAAAAAGGGTCAGTCTACCTCCCGCCATAAAAAACTCATGTTCAAGA
CAGAAGGGCCTGACTCAGACTGA$_{1837}$CATTCTCCACTTCTTGTTCCCCACTGACA
GCCTCCCACCCCCATCTCTCCCTCCCCTGCCATTTTGGGTTTTGGGTCTTTGAAC
CCTTGCTTGCAATAGGTGTGCGTCAGAAGCACCCAGGACTTCCATTTGCTTTGT
CCCGGGGCTCCACTGAACAAGTTGGCCTGCACTGGTGTTTTGTTGTGGGGAGGA
GGATGGGGAGTAGGACATACCAGCTTAGATTTTAAGGTTTTTACTGTGAGGGAT
GTTTGGGAGATGTAAGAAATGTTCTTGCAGTTAAGGGTTAGTTTACAATCAGCC
ACATTCTAGGTAGGGGCCACTTCACCGTACTAACCAGGGAAGCTGTCCCTCACT
GTTGAATTTTCTCTAACTTCAAGGCCCATATCTGTGAAATGCTGGATTTGCCCTA
CCTCGGAATGCTGGCATTTGCACCTACCTCACAGAGTGCATTGTGAGGGTT$_{2297}$A
ATGAAATAATGTACATCTGGCCTTGAAACCACCTTTTATTACATGGGGTCTAGC
GGGATCCACTAGTAACGCCGCCAGTGTGCTGGAATTCTGCAGATATCCATCACA
CTGGCGGCCGCTCGAGCATGCATCTAGAGCTCGCTGATCAGCCTCGACTGTGCC
TTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCCGTGCCTTCCTTGACCCTG
GAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCAT
TGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAA
GGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTA
TGGCTTCTGAGGCGGAAAGAACCAGCTGGGGCTCGAGGGGGATCCCCACGCTA
GAGCT$_{2733}$GACTATAATAATAAACGCCAACTTTGACCCGGAACGCGGAAAACA

~~CCTGAGAAAAACACCTGGGCGAGTCTCCACGTAAACGGTCAAAGTCCCCGCGG~~
~~CCCTAGACAAATATTA~~$_{2848}$ ~~the left end of adenovirus 5,~~

~~wherein:~~

~~1) the right end of adenovirus 5 and the left end of adenovirus 5 are described in the full sequence of adenovirus 5 (Genbank No: NC_001406)~~

~~2) 1-70: the right arm of adenovirus (the 70~~th ~~base locates at adenovirus gene sequence 3328)~~

~~3) 71-523 : Rous Sarcoma Virus (RSV) LTR (promoter)~~

~~4) 524-655: 5' end non-translating region~~

~~5) 656-1837: p53 gene coding sequence~~

~~6) 1838-2733: 3' end non-translating region (poly-Adenosine tail starting at 2298)~~

~~2734-2848: the left arm of adenovirus (base at 2734 is positioned at 452 of adenovirus 5 gene sequence)~~ <u>An application of a recombinant of adenovirus vector and human tumor suppressor p53 gene expression cassette for producing the medicine for treating proliferative disease.</u>

2. (Currently Amended) The ~~recombinant gene medicine~~ <u>application</u> according to Claim 1, wherein the <u>adenovirus vector and human tumor suppressor p53</u> gene expression cassette of the recombinant is a specific sequence composed of promoter-p53cDNA-poly adenosine.

3. (Currently Amended) The ~~recombinant gene medicine~~ <u>application</u> according to claim 2, wherein the upstream of the gene expression cassette is any eukaryotic cell promoters, prokaryotic cell promoters or virus promoters, and the downstream is any of the eukaryotic gene poly adenosine residues (Poly A tail).

4. (Currently Amended) The ~~recombinant gene medicine~~ <u>application</u> according to claim 1, wherein the recombinant gene medicine is obtained in prokaryotic cells by homologous recombination, including:

1) the recombinant pGT-2 is obtained by homologous recombination of adenovirus and plasmid pGT-1 (containing two inverted terminal repeats on both ends of adenovirus) in ~~E.~~

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coli prokaryotic cells;

2) the recombinant pGT-3 is obtained by homologous recombination of pGT-2 and artificial sequence "the right arm of adenovirus/ promoter-p53cDNA-poly A / the left arm of adenovirus " in ~~E. coli~~ prokaryotic cells;

3) The recombinant p53 adenovirus is obtained by discarding the prokaryotic sequence using endonuclease *Pac*I.

5. (Currently Amended) ~~The recombinant gene medicine according to claim 4, wherein the recombinant gene medicine is obtained in any prokaryotic cells by homologous recombination~~ The application according to claim 4, wherein the prokaryotic cell is *E. coli*.

6. (Currently Amended) ~~The recombinant gene medicine according to claim 1 is used to produce injection solution~~ The application according to claim 1, wherein the proliferative disease is any kind of scar.

7. (Currently Amended) ~~The recombinant gene medicine according to claim 6 is used to produce injection~~ The application according to claim 6, wherein the scar is pathological scar.

8. (New) The application according to claim 7, wherein the pathological scar is cheloid.

9. (New) The application according to claim 1, wherein the recombinant is used to produce injection solution.